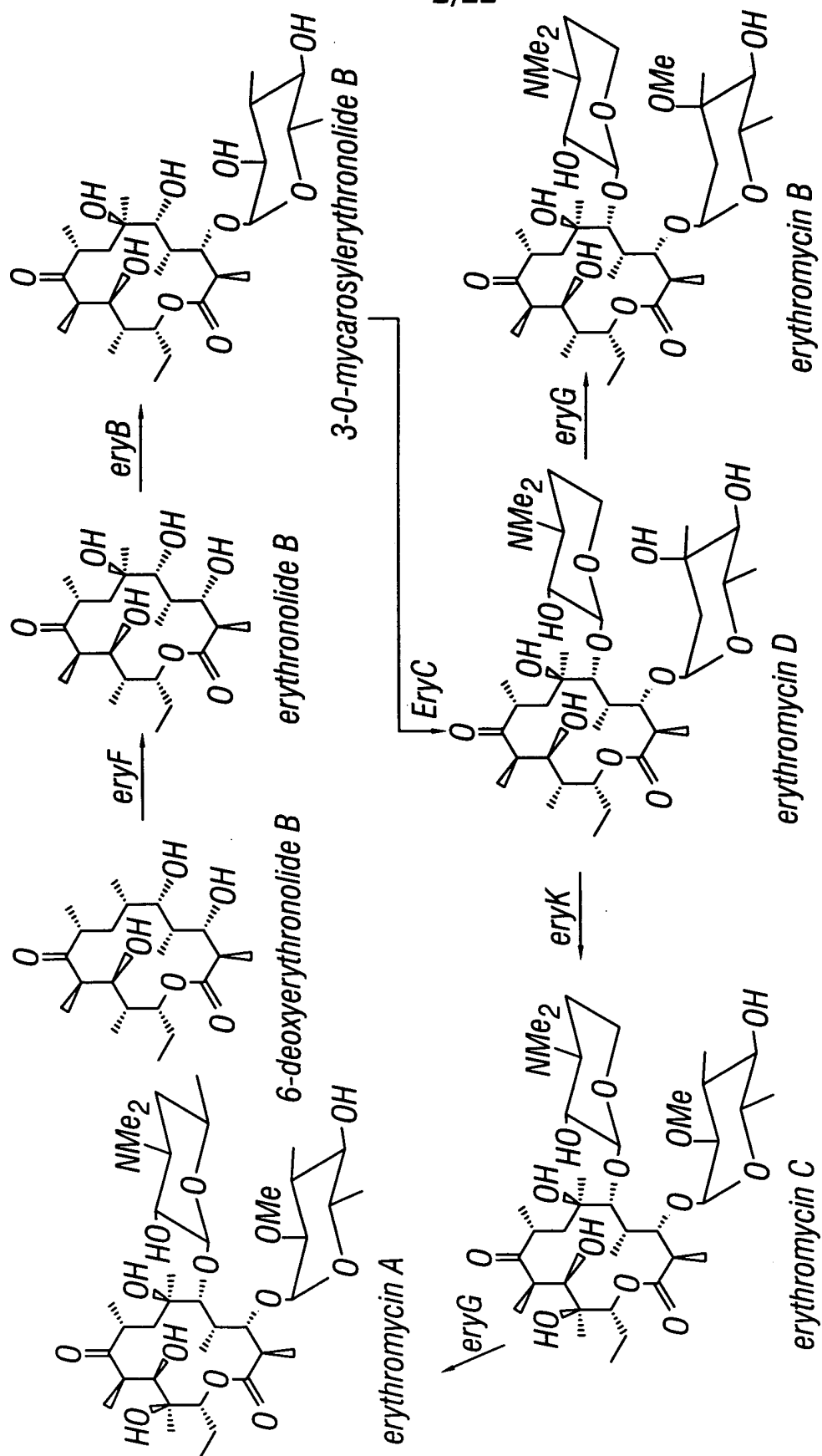
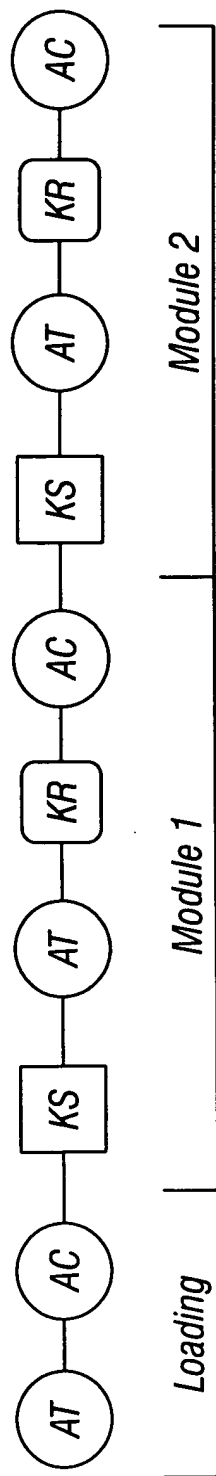


FIG. 1A

FIG. 1B



DEBSI:



Generic Modular PKS

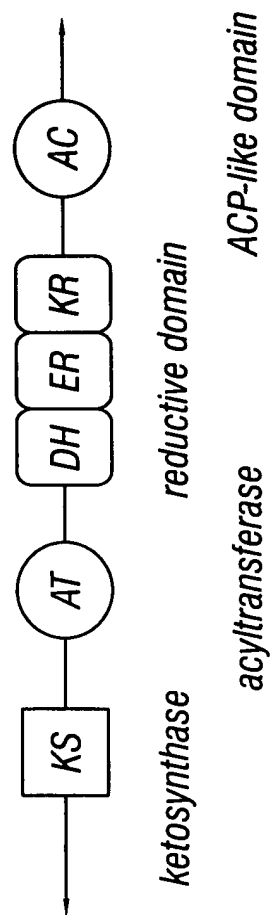


FIG. 2

4/22

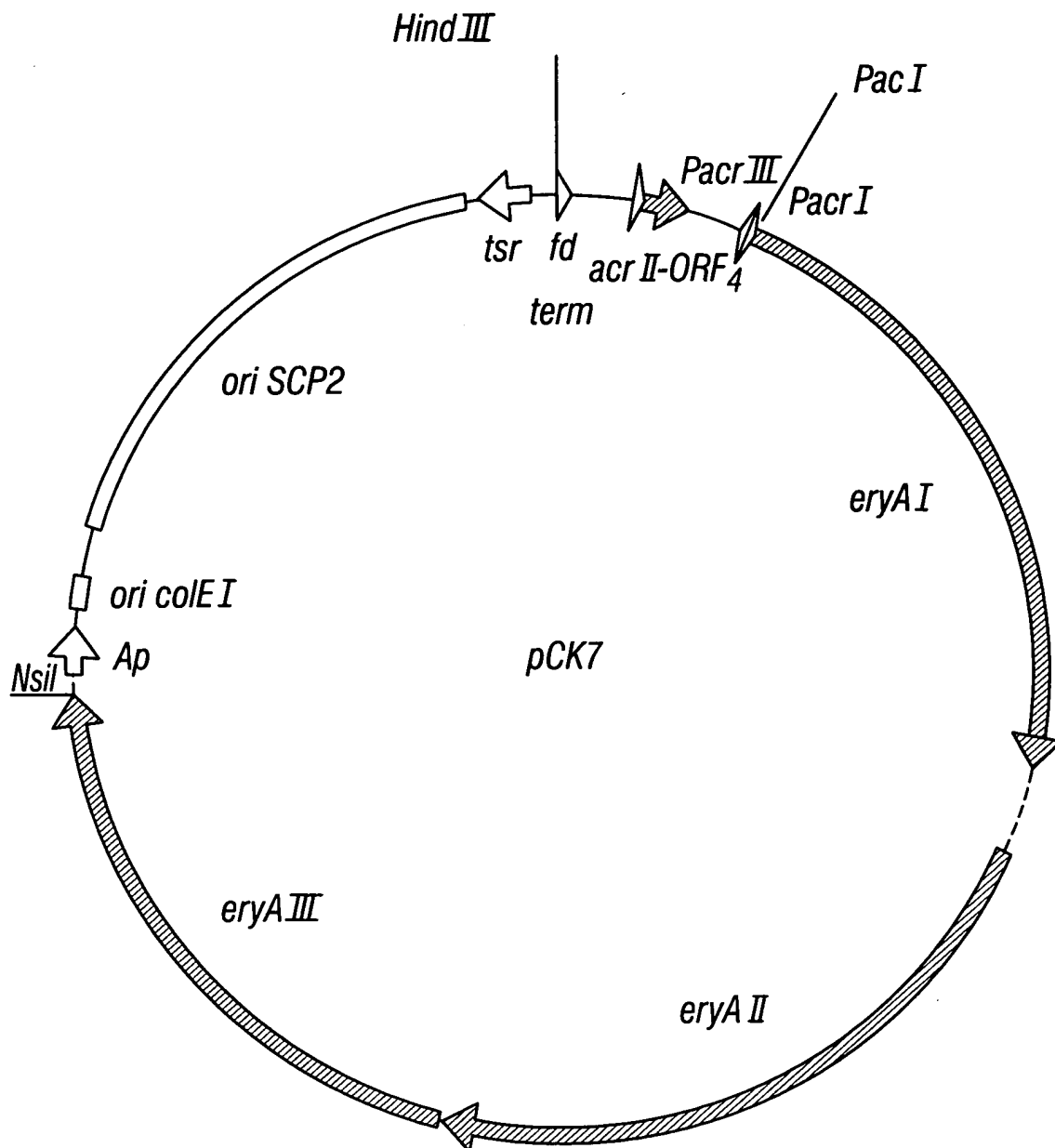
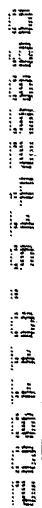


FIG. 3

**FIG. 4**

6/22

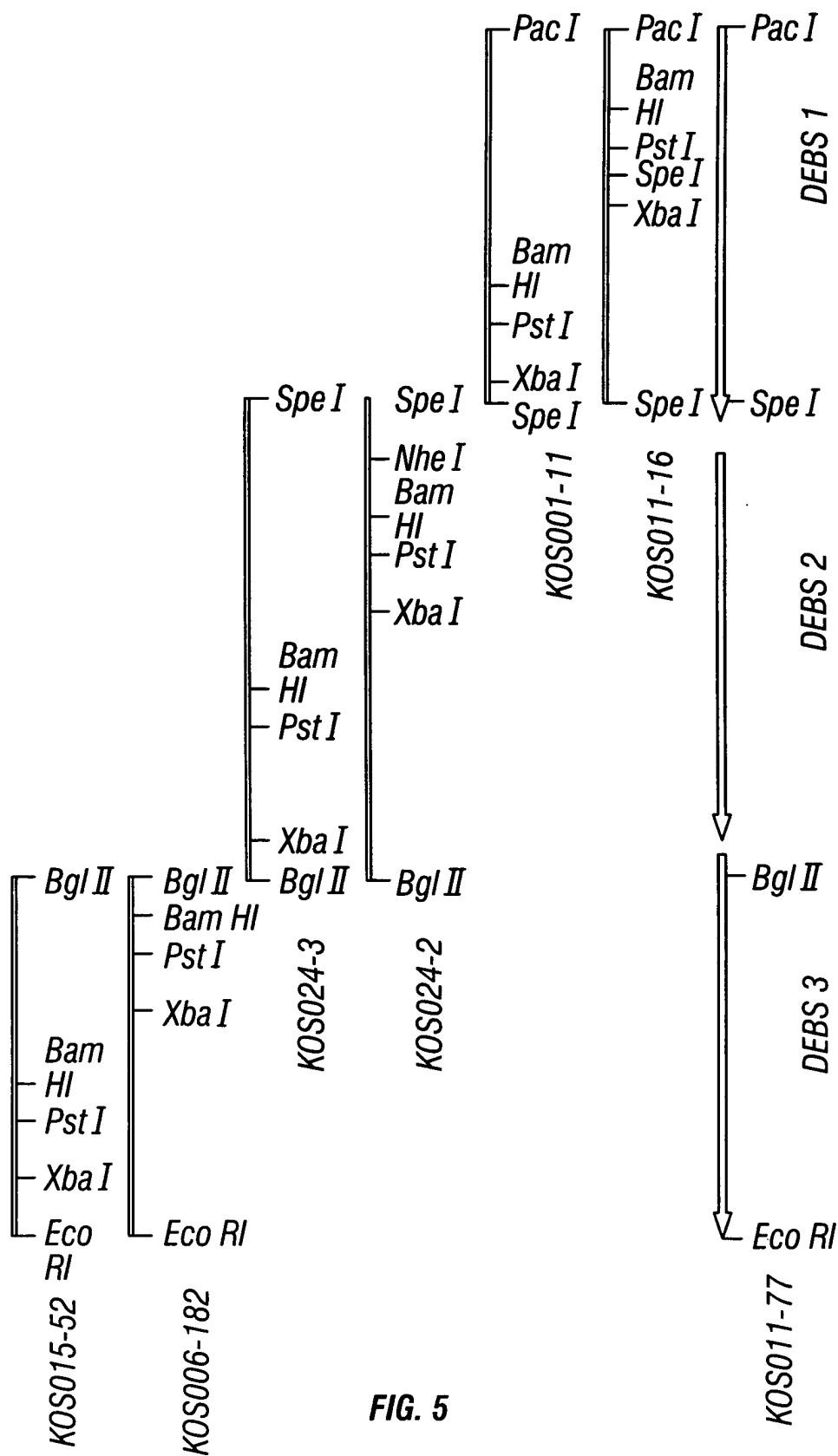


FIG. 5

7/22

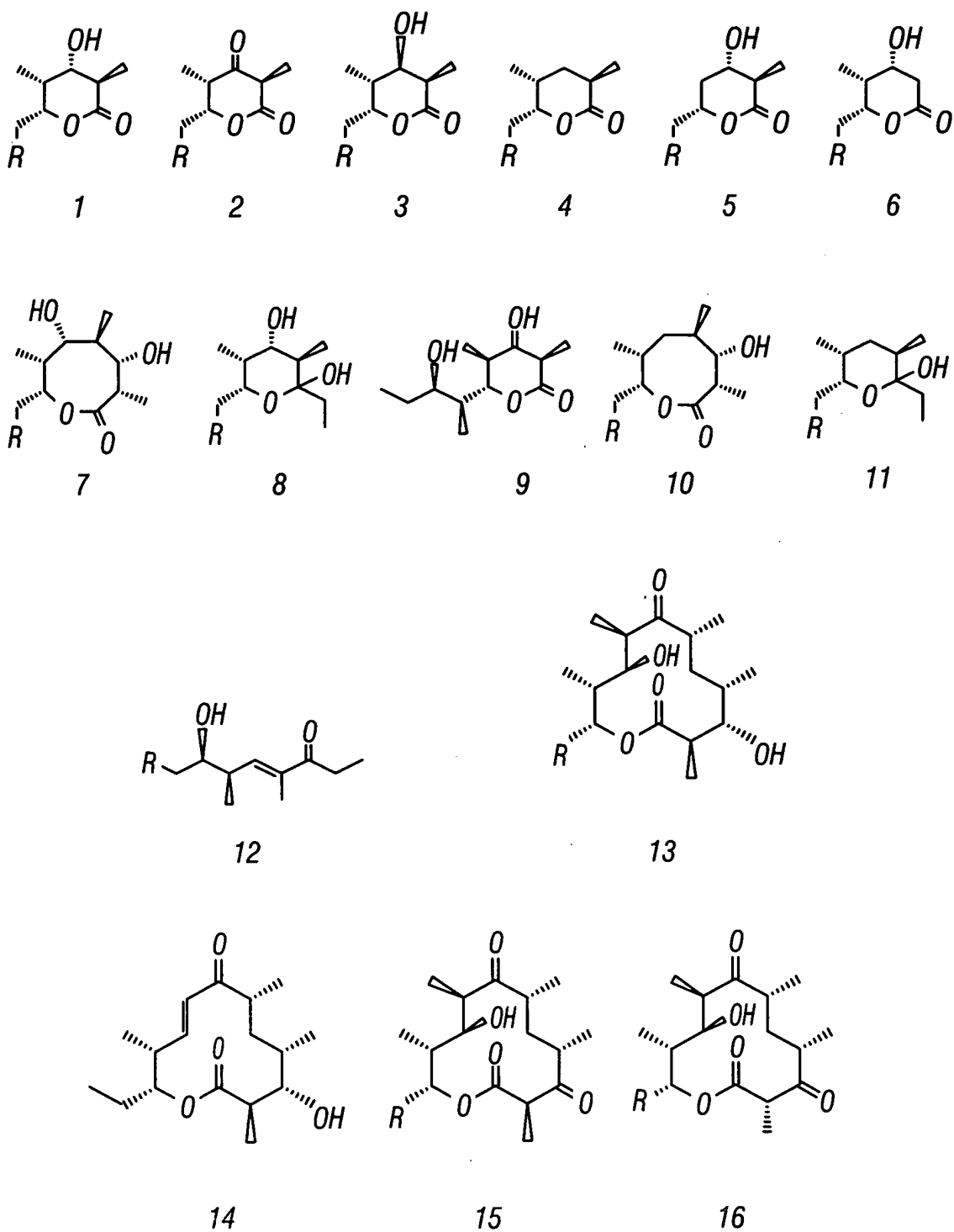


FIG. 6A

8/22

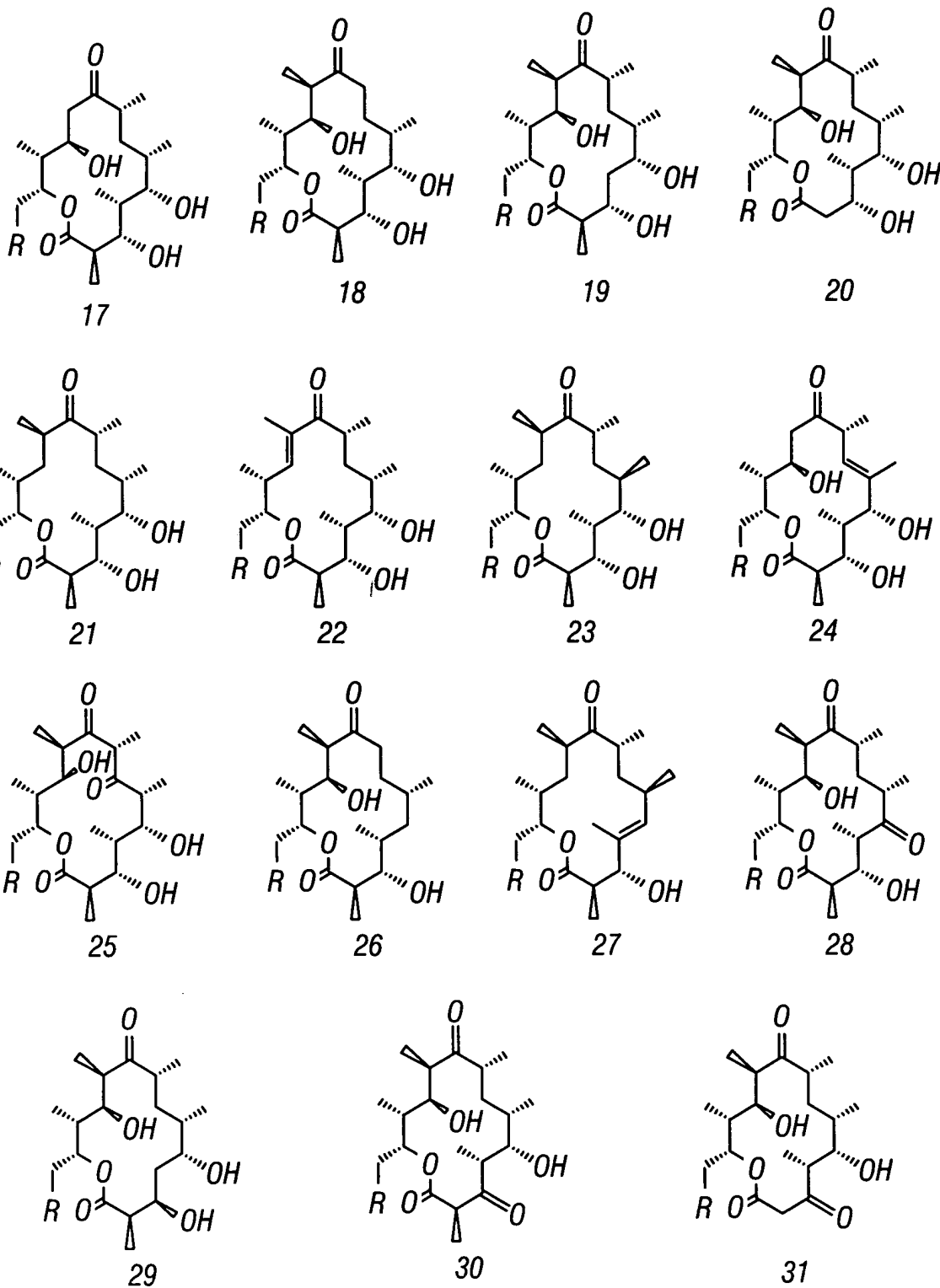
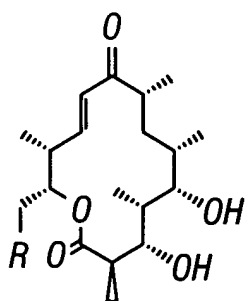
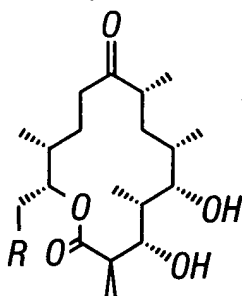


FIG. 6B

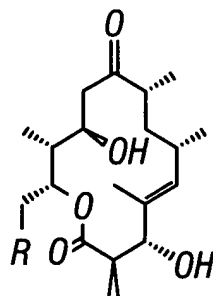
9/22



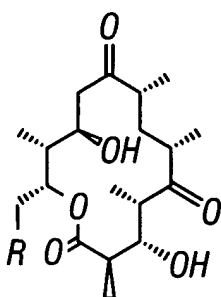
32



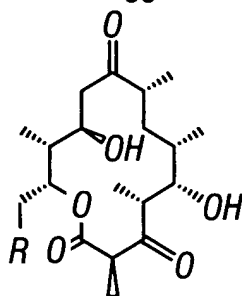
33



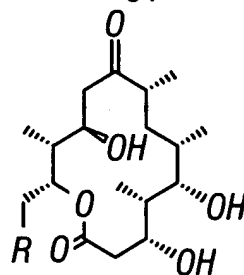
34



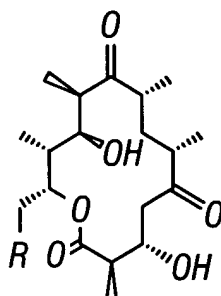
35



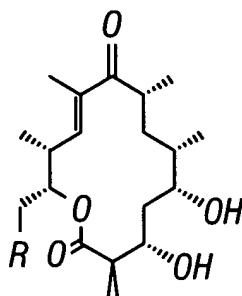
36



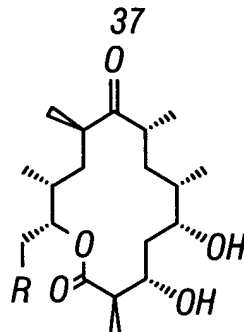
37



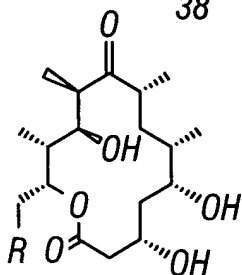
38



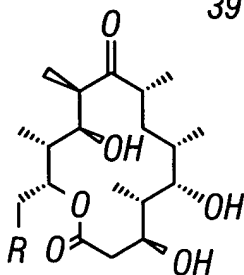
39



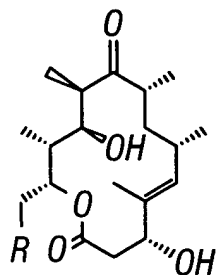
40



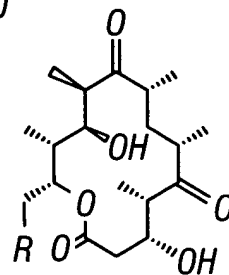
41



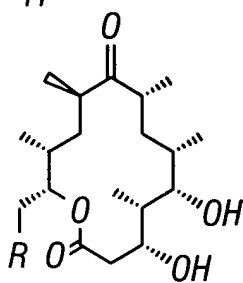
42



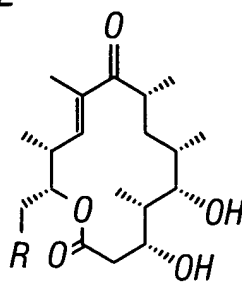
43



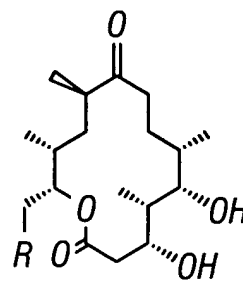
44



45



46



47

FIG. 6C

2006-09-22

10/22

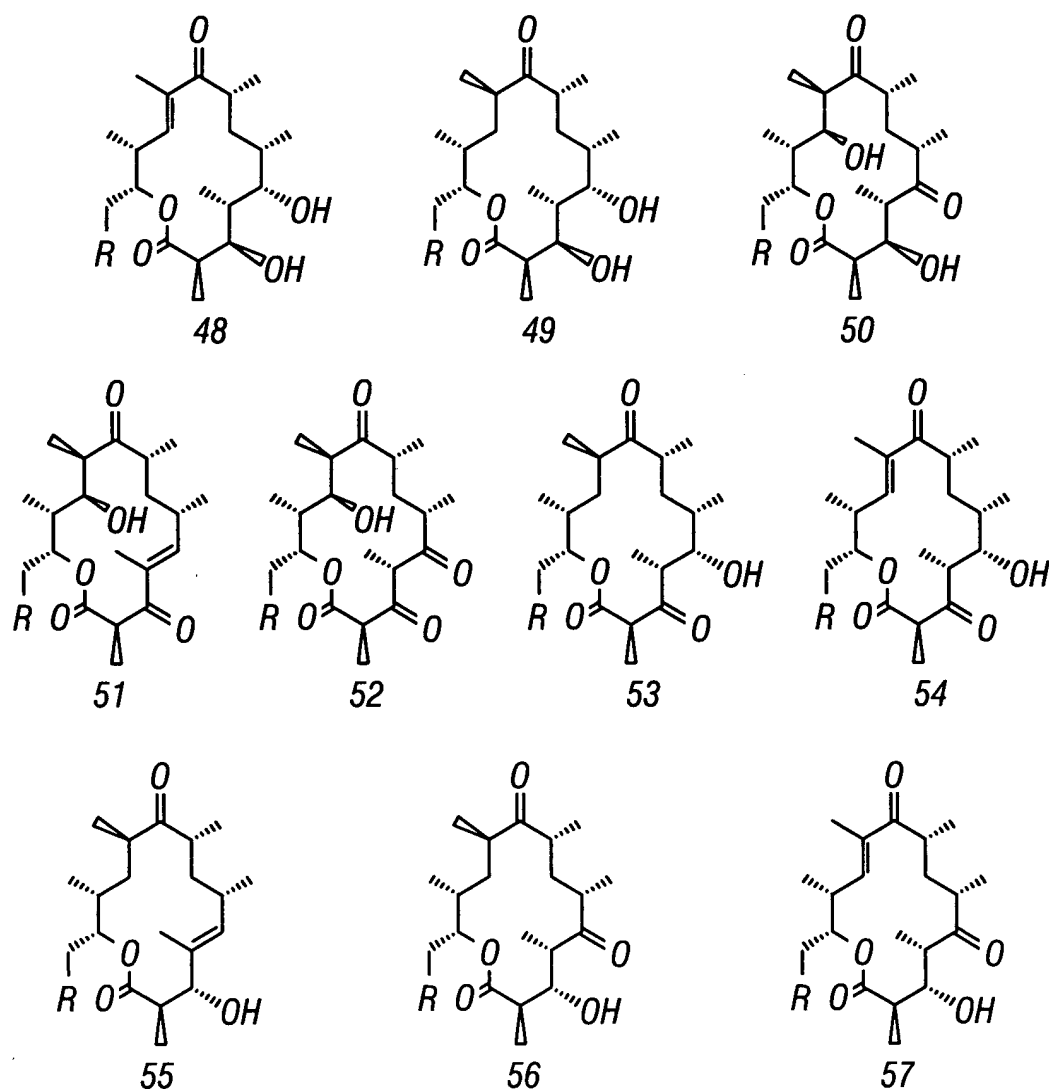


FIG. 6D

2007-09-24 10:22:10

11/22

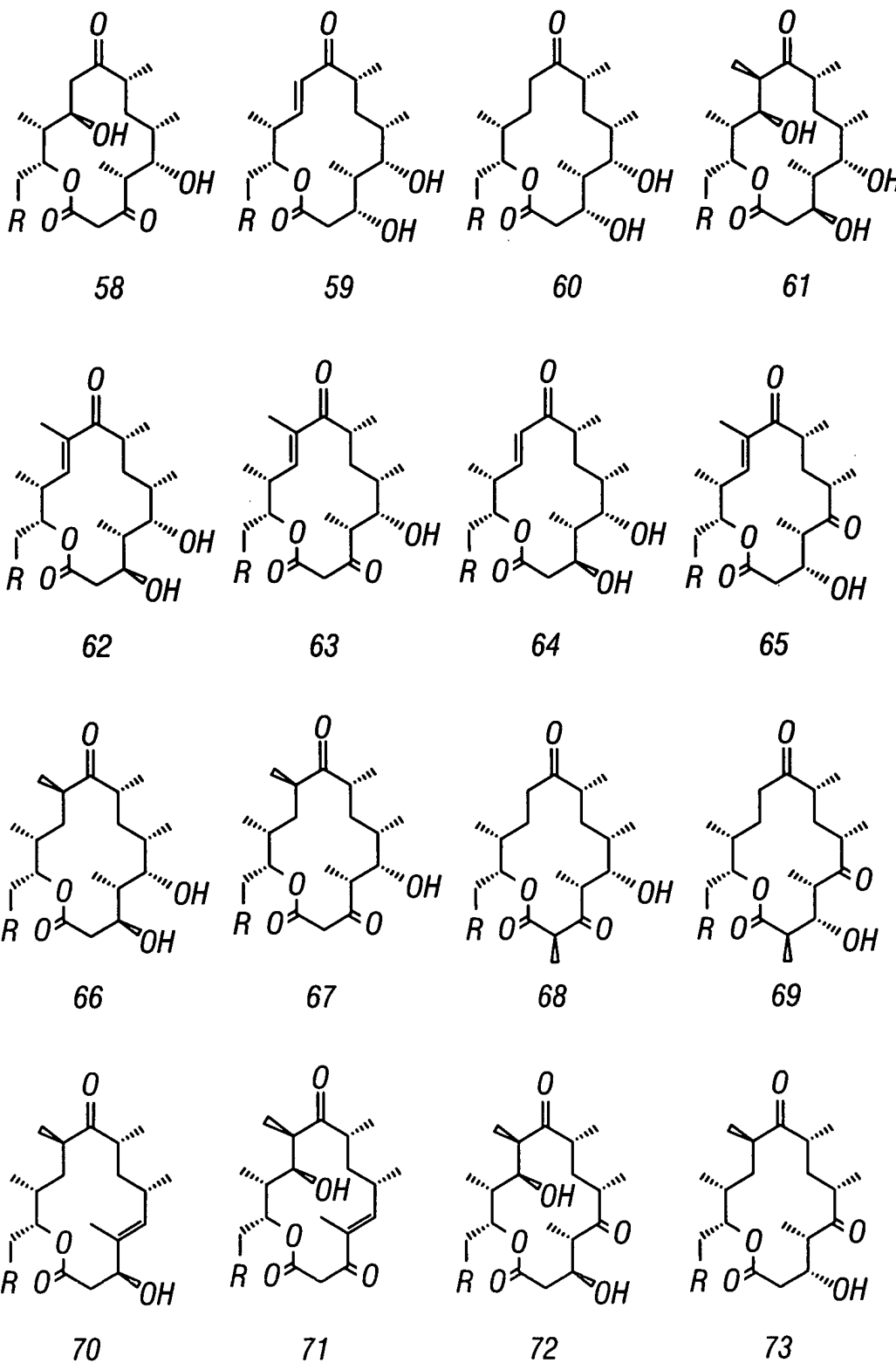


FIG. 6E

12/22

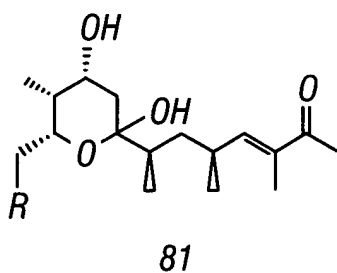
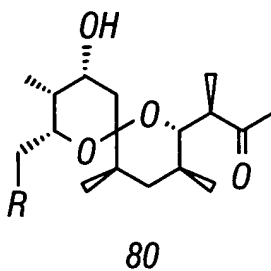
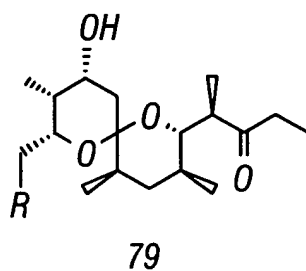
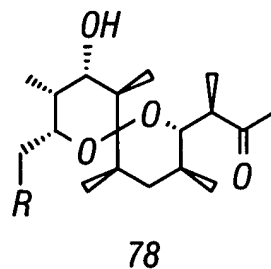
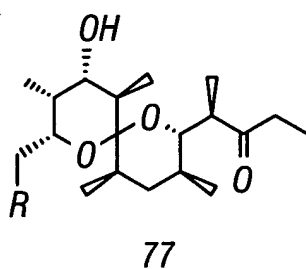
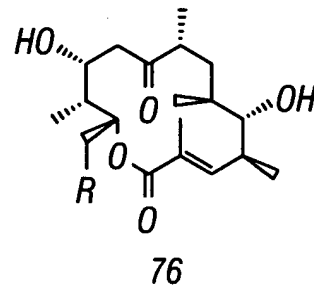
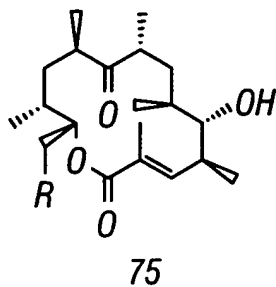
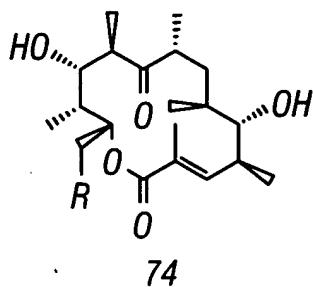


FIG. 6F

20061003125360

13/22

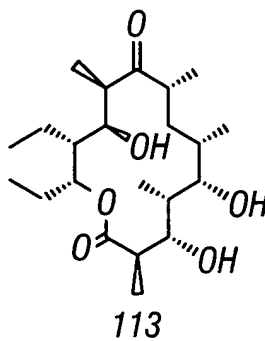
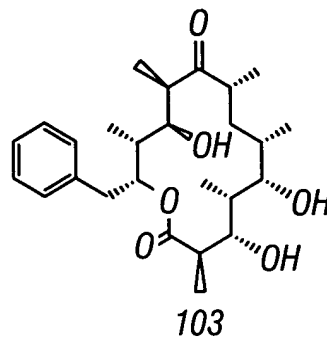
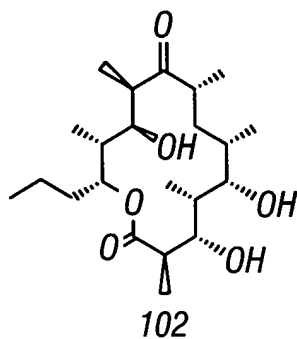
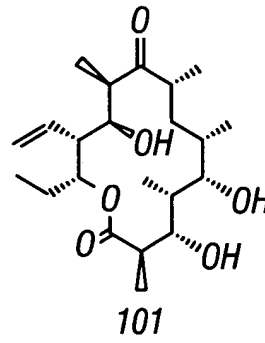
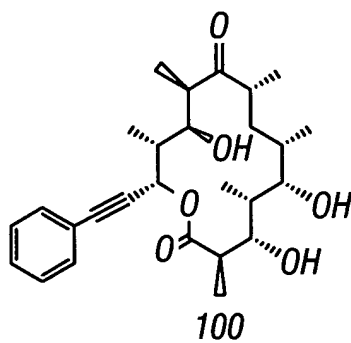
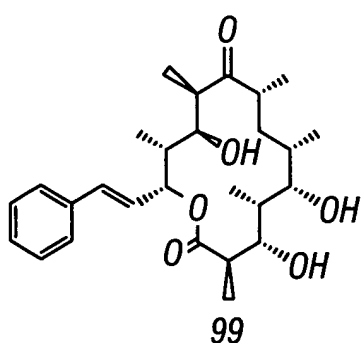
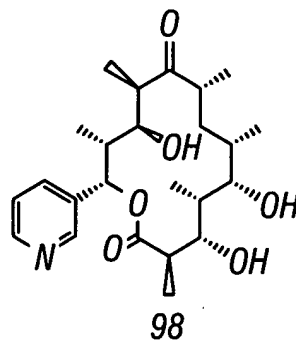
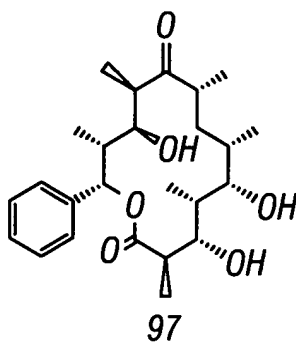
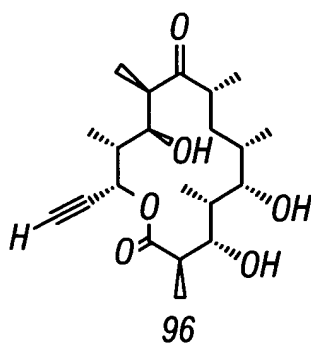
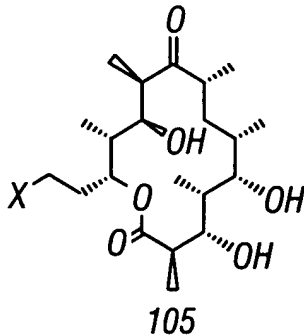
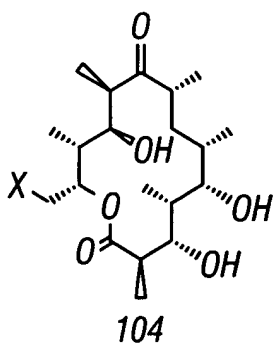


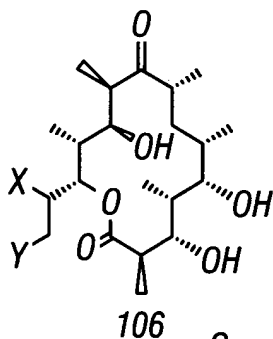
FIG. 6G

2006-07-20 09:25:00

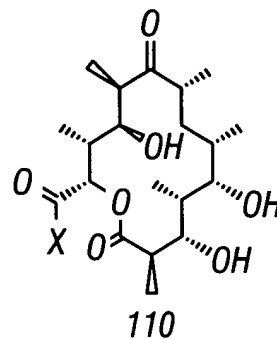
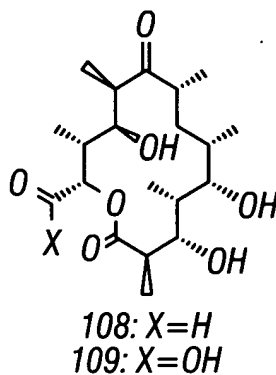
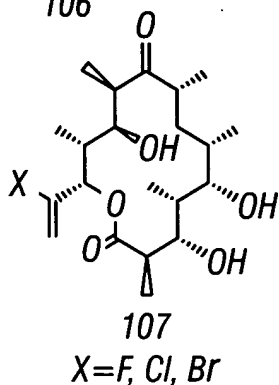
14/22



$X = F, Cl, Br, N_3, OH, O\text{-alkyl}, S\text{-alkyl}, CN, O\text{-acyl}, O\text{-aryl}, NH_2, NH\text{-alkyl}, N(alkyl)_2$



$X = F; Y = H, Br, I, OH, O\text{-alkyl}, O\text{-aryl}, N_3, CN, S\text{-alkyl}, S\text{-aryl}$
 $X = OH, Y = OH$
 $X, Y = -O-, -NH-, -NR-$



$X = O\text{-alkyl}, O\text{-aryl}, NH_2, NH\text{-alkyl}, N(alkyl)_2, NH\text{-aryl}$

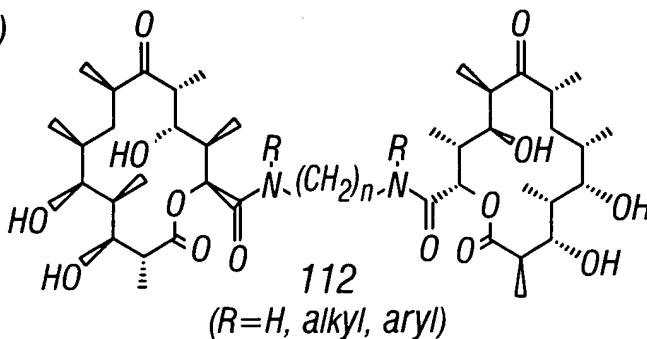
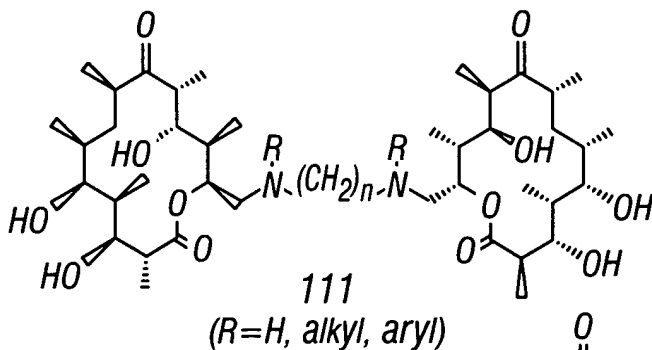


FIG. 6H

2006-03-16 14:22:56

15/22

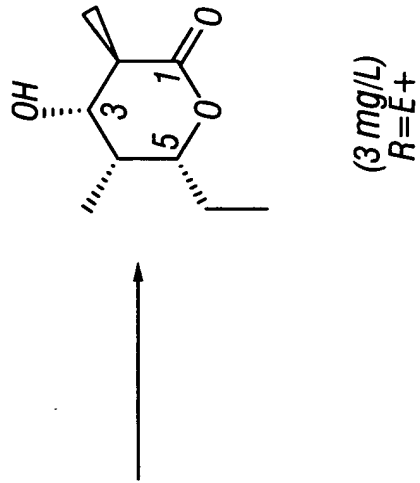
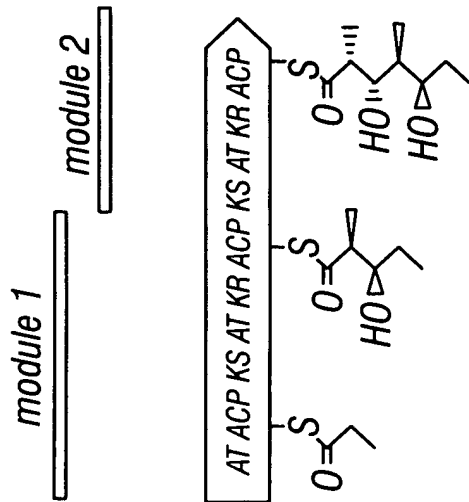


FIG. 7A

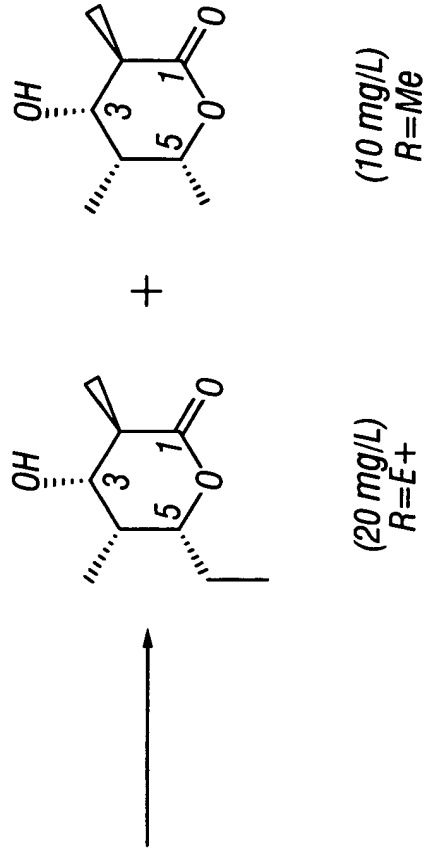
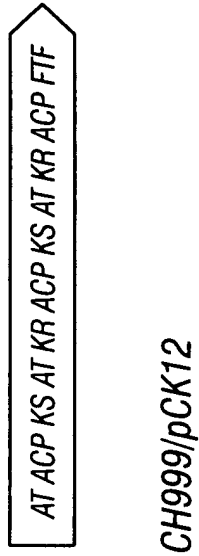
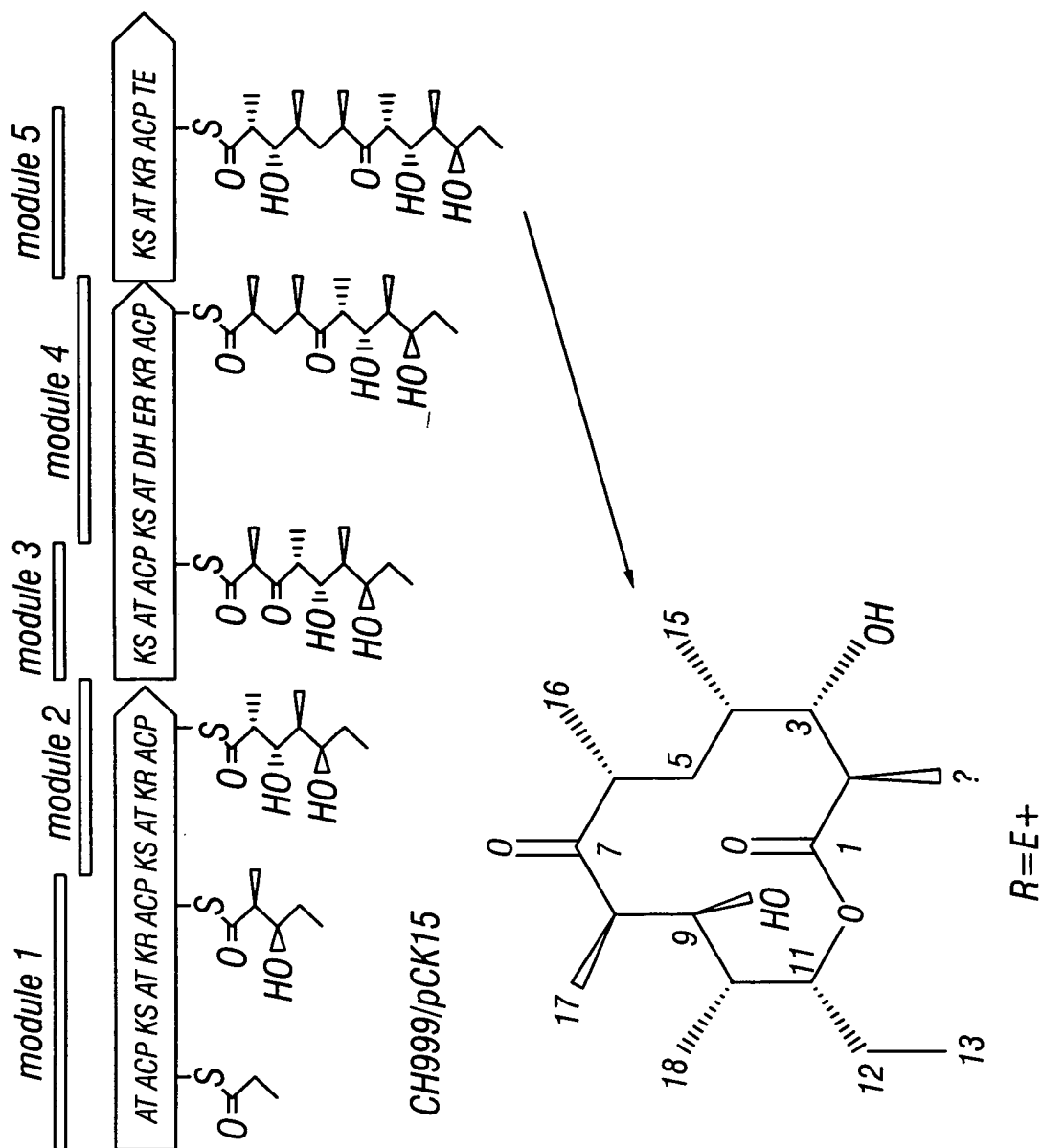


FIG. 7B



16/22



17/22

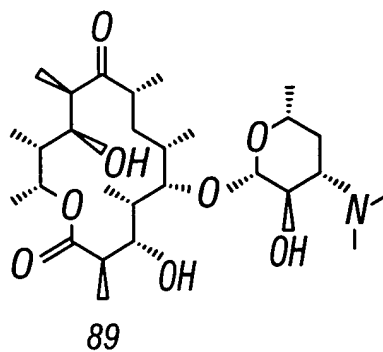
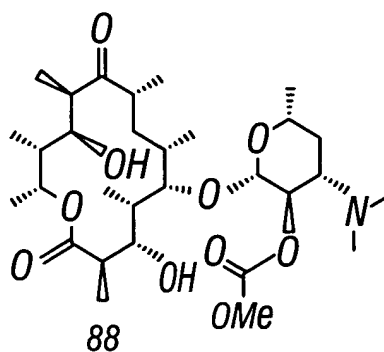
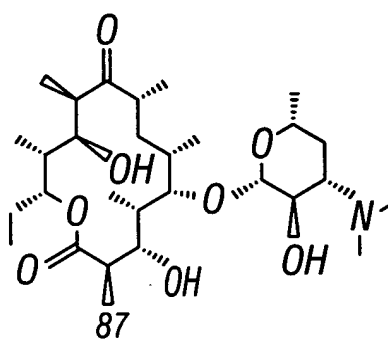
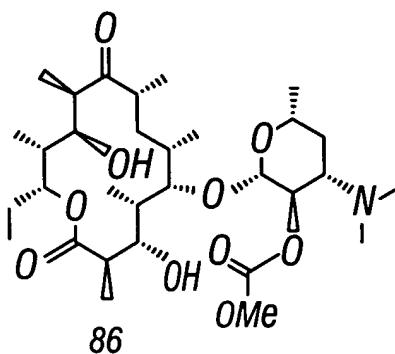
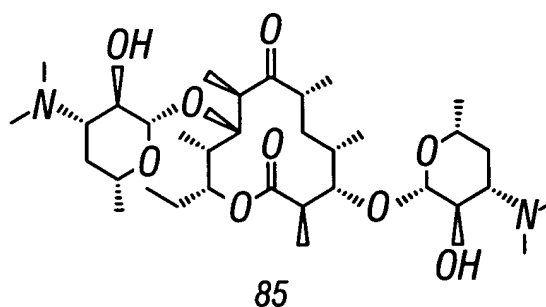
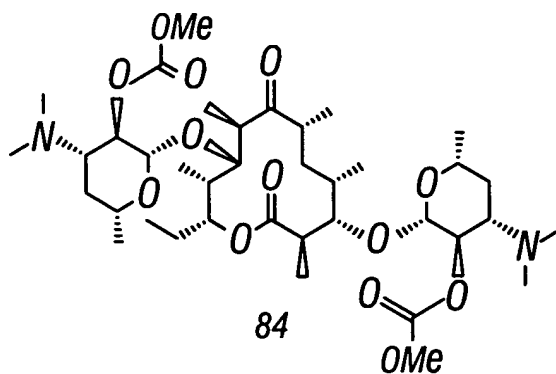
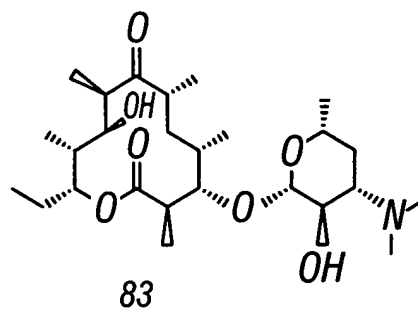
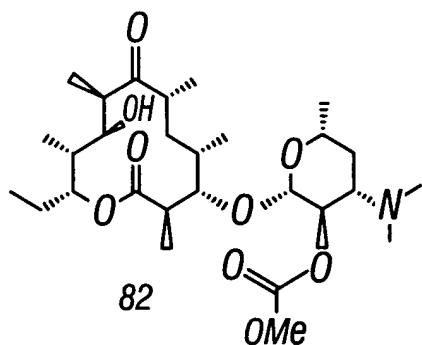


FIG. 8A

18/22

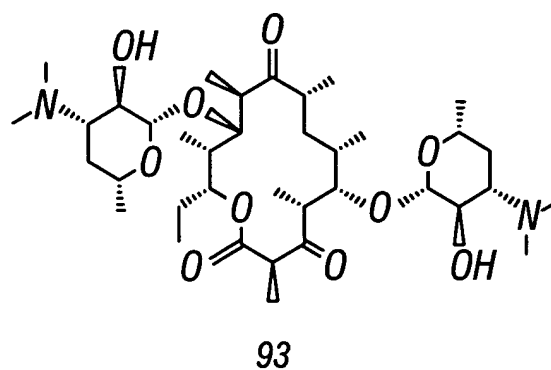
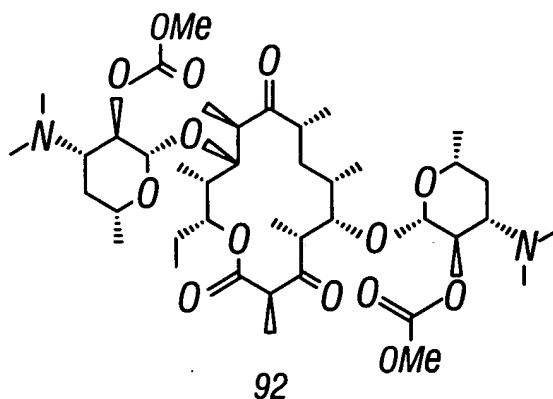
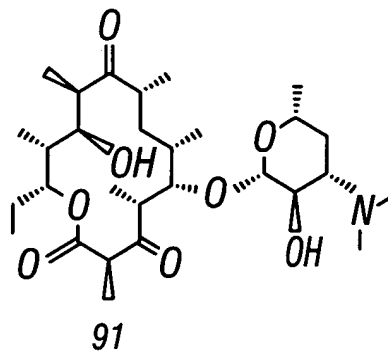
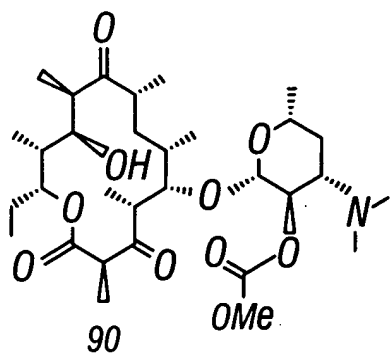


FIG. 8B

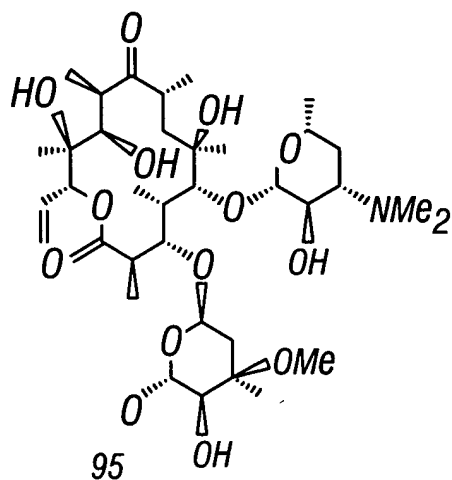
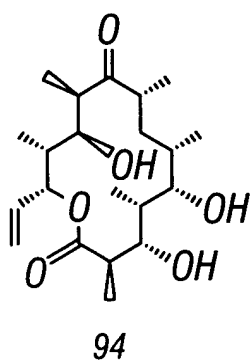


FIG. 9

19/22

Preparation of 1-(2-mercaptopyrimidinyl)-2-O-(methoxycarbonyl)-(D)-desosamine

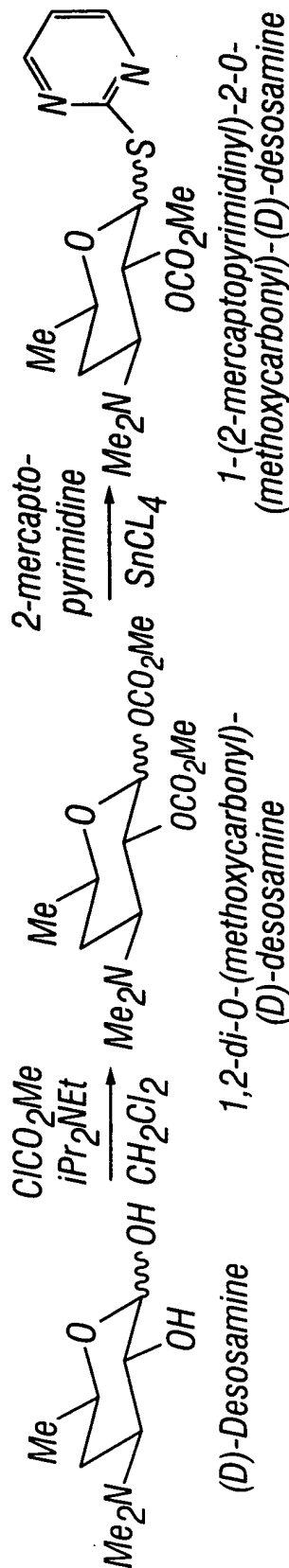
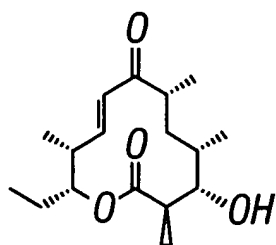
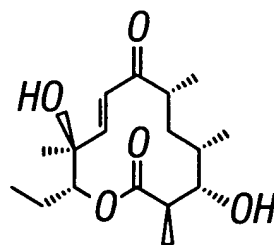


FIG. 10

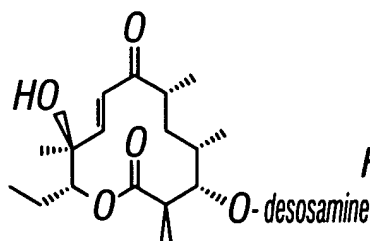
20/22



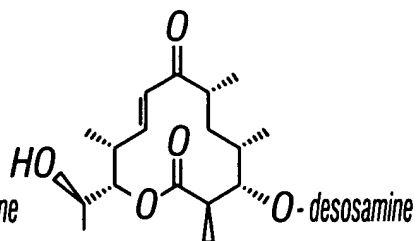
10-deoxymethynolide
210



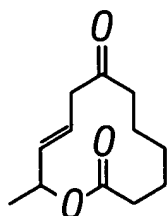
methynolide
211



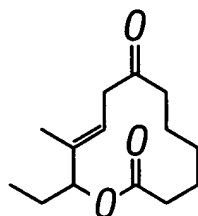
methymycin
212



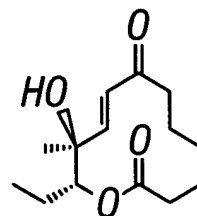
neomethymycin
213



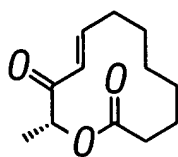
201



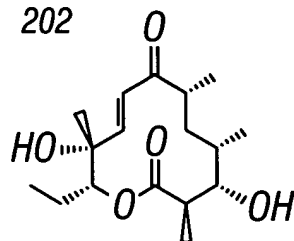
202



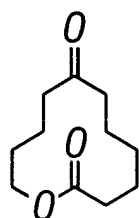
203



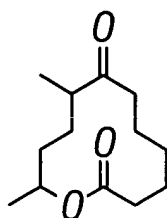
204



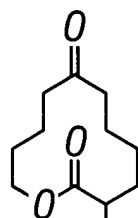
10-epi-methynolide
205



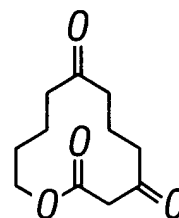
206



207



208



209

FIG. 11

21/22

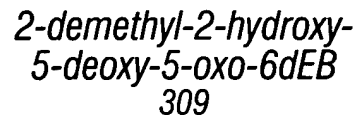
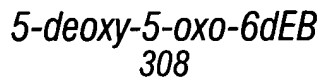


FIG. 12A

22/22

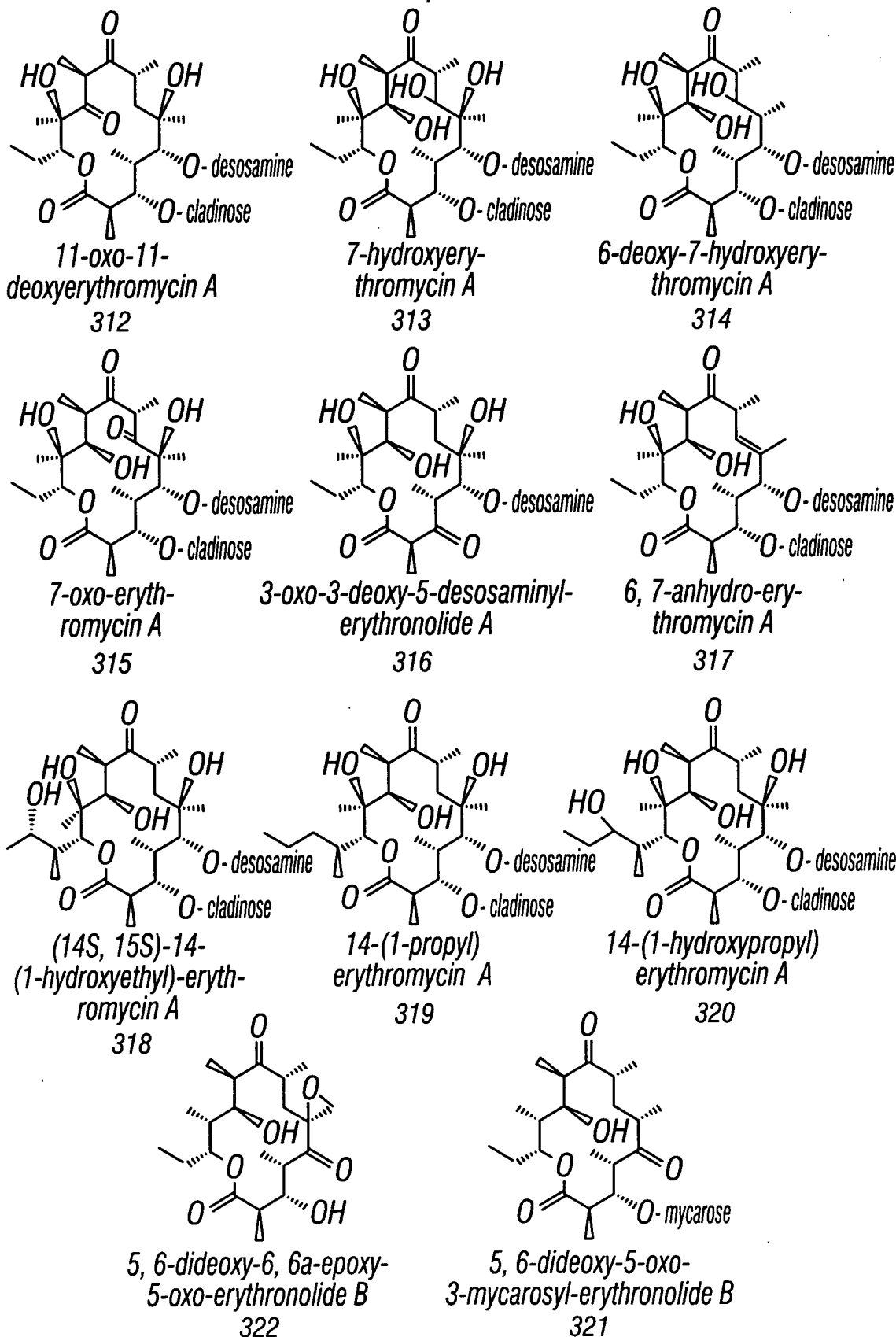


FIG. 12B